

ABSTRACT OF THE DISCLOSURE

A first stator is provided with stator electrodes sequentially arranged in a predetermined direction. An extended electrode is mounted on a second stator arranged to face the first stator. A slider is movably arranged between the first and second stators. The slider is provided with a large number of slider electrodes arranged to face the stator electrodes and a second slider electrode facing the extended electrode. The slider electrodes are maintained at the ground potential. A first and second driving voltage are periodically applied to the stator electrodes and to the extended electrode, respectively, which are opposite to each other in phase and are periodically switched between the ground potential and the positive driving voltage. Thus, the slider is moved in a direction while being vibrated.